



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-02-13
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giovanni Giacopello	Representative Title	AMS & IPD Materials Declaration Champion
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	22AA*MV1WAFB	A	MA1A	2014-02-13
Amount	UoM	Unit type	ST ECOPACK Grade	
8.0	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable ; if coating is used o	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
LGA	2,2,1	14	No lead	
Comment	Package: LGA 2x2x1 Pitch 0.35 14LD; MDF valid for LIS2DHTR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devic

QueryList :REACH-16 December 2013				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Diboron trioxide	1000 ppm	0.012		1500

Material Composition Declaration						Mfr Item Name	22AA*MV1WAFB					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	2.973	mg	supplier	die	Silicon (Si)	7440-21-3		2.602	mg	875210	325250
die (s)				supplier	metallisation	Aluminium (Al)	7429-90-5		0.008	mg	2691	1000
die (s)				supplier	metallisation	Copper (Cu)	7440-50-8		0.017	mg	5718	2125
die (s)				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.001	mg	336	125
die (s)				supplier	metallisation	Gold (Au)	7440-57-5		0.044	mg	14800	5500
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.006	mg	2018	750
die (s)				supplier	passivation	Silicon Oxide	7631-86-9		0.125	mg	42045	15625
die (s)				R	passivation	Lead Oxide	1317-36-8	7c-I-Electrical and e	0.109	mg	36663	13625
die (s)				supplier	passivation	Boron Trioxide	1303-86-2		0.012	mg	4036	1500
die (s)				supplier	passivation	Silicon Oxide	7631-86-9		0.017	mg	5718	2125
die (s)				supplier	passivation	Aluminium oxide	1344-28-1		0.017	mg	5718	2125
die (s)				supplier	passivation	Butyl Carbitol Acetate	124-17-4		0.009	mg	3027	1125
die (s)				supplier	passivation	Ethyl cellulose	9004-57-3		0.003	mg	1009	375
die (s)				supplier	passivation	Terpineol	8000-41-7		0.003	mg	1009	375
substrate	Other Organic Materials	2.24	mg	supplier	core material	Bismaleimide (B)	105391-33-1		0.236	mg	105357	29500
substrate				supplier	core material	Triazine (T)	25722-66-1		0.236	mg	105357	29500
substrate				supplier	core material	Fiber glass	65997-17-3		0.704	mg	314286	88000
substrate				supplier	core material	metal hydroxide	21645-51-2		0.016	mg	7143	2000
substrate				supplier	core material	Zinc hydroxide	20427-58-1		0.005	mg	2232	625
substrate				supplier	core material	Thermosetting resin	54208-63-8		0.395	mg	176339	49375
substrate				supplier	core material	Calcium sulfate	7778-18-9		0.008	mg	3571	1000
substrate				supplier	Solder mask	Baryum sulfate	7727-43-7		0.043	mg	19196	5375
substrate				supplier	Solder mask	(2-methoxymethylethoxy)propanol	34590-94-8		0.007	mg	3125	875
substrate				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		0.024	mg	10714	3000
substrate				supplier	Solder mask	Quartz	14808-60-7		0.024	mg	10714	3000
substrate				supplier	Solder mask	Acrylates derivative	9003-01-4		0.099	mg	44196	12375
substrate				supplier	Solder mask	Epoxy resin	29690-82-2		0.033	mg	14732	4125
substrate				supplier	Solder mask	aromatic hydrocarbon	Proprietary		0.01	mg	4464	1250
substrate				supplier	metallisation	Copper (Cu)	7440-50-8		0.376	mg	167857	47000
substrate				supplier	metallisation	Nickel (Ni)	7440-02-0		0.02	mg	8929	2500
substrate				supplier	metallisation	Gold (Au)	7440-57-5		0.004	mg	1786	500
Die attach	Other Organic Materials	0.414	mg	supplier	glue or tape	Acrylic resin	9003-01-4		0.131	mg	316425	16375
Die attach				supplier	glue or tape	epoxy resin	Proprietary		0.262	mg	632850	32750
Die attach				supplier	glue or tape	Diphenol Propane Diglycidyl Ether	1675-54-3		0.021	mg	50725	2625
Bonding wire	Precious metals	0.206	mg	supplier	wire	Gold (Au)	7440-57-5		0.204	mg	990291	25500
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	9709	250
encapsulation	Other Organic Materials	2.167	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1.898	mg	875865	237250
encapsulation				supplier	mold compound	Epoxy Resin	85954-11-6		0.086	mg	39686	10750
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		0.086	mg	39686	10750
encapsulation				supplier	mold compound	Phenol Resin	26834-02-6		0.086	mg	39686	10750
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.011	mg	5076	1375